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DY BUILDING NUMBER				
Bartista				
		Former Uses	Current Status	
Building 704	E	Two Former Animal Pens	Removed	
Animal Pens				
Building 704	E	Location of Former Radioactive Materials Storage Area	Unoccupied	
Radioactive				
Materials Area	T	NDDI B 1' ' W ' B ' '	77 1	
Building 707	E	NRDL Radioactive Waste Receiving	Unoccupied	
Waste Triangle E-1 to E-120	177	120 Hamais Hats	Demolished	
	<u>Е</u> Е	120 Homoja Huts	Demolished	
Experimental	E	Experimental Shielding Range	Unused open land	
Shielding Range IR-01	E	Industrial Landfill	Under CERCLA investigation	
IR-02	E	Bay Fill	Under CERCLA investigation	
IR-03	E	Oil Reclamation Ponds	Under CERCLA investigation	
IR-04	<u>E</u>	Scrap Yard	Under CERCLA investigation	
IR-05	<u>E</u>	Old Transformer Storage Yard	Under CERCLA investigation	
IR-11	E	Power Plant Area (Building 521)	Under CERCLA investigation	
IR-12	<u>E</u>	Disposal Trench Area	Under CERCLA investigation	
IR-13	E E	Old Commissary Area	Under CERCLA investigation	
IR-14	<u>E</u>	Oily Liquid Waste Disposal Area	Under CERCLA investigation	
IR-15	<u>E</u>	Oily Waste Ponds and Incineration Tank	Under CERCLA investigation	
IR-21	E E	Area Southwest of Building 801	Under CERCLA investigation	
IR-36	E	Building 371, 400, 404A, 405, 406, 413, 414, 704, and 710	Under CERCLA investigation	
IR-40	E	Building 527 and Pier 2	Under CERCLA investigation	
IR-52	E	Railroad Right-of-Way (off site west of facility)	Under CERCLA investigation	
IR-54	E	Building 511A	Under CERCLA investigation	
IR-56		Railroad Yard and Track Southwest of Crisp Avenue	Under CERCLA investigation	
IR-72	E	Building 810 Area	Under CERCLA investigation	
IR-73	E	Asphalt Batch Plant	Under CERCLA investigation	
IR-74	E	Building 815 (Formerly Used Defense Site)	Under CERCLA investigation	
IR-75	Е	Building 820 (Formerly Used Defense Site)	Under CERCLA investigation	
IR-76	Е	Area Surrounding Building 830 and 831 (FUDS)	Under CERCLA investigation	

FINAL Page 19 of 22

8.3.5.28 IR-01/21, Industrial Landfill Area



Site Description: Irregular land area, measuring approximately 1,525,000 square feet, 120 feet southeast of Building 820, 80 feet south of Building 830, 150 feet southwest of Building 810, and immediately west and adjacent to IR-02. A site plan is provided in Figure 8.3.5.28.

Former Uses: Landfill used from 1940s to 1974 for disposal of industrial and solid wastes; domestic wastes and refuse; building construction and demolition wastes; dredge spoil materials; sandblast waste; shop industrial, chemical, and solvent wastes; ship solid and liquid wastes from repair activities; and radioluminescent devices, primarily containing Ra-226. Potentially used for disposal of wastes from decontamination of OPERATION CROSSROADS ships.

Current Uses: Unoccupied Open Land.

Radionuclides of Concern: Cs-137, Ra-226, and Sr-90 (HRA-1274; HRA-1447).

Previous Radiological Investigations:

2002-2003 NWT Phase V investigations. Gamma survey indicated several locations of

elevated levels.

1993 PRC Phase II investigations. Walkover survey and radon flux testing

indicated radioactive material. Excavation and survey detected 111 discrete

Ra-226 point sources.

1991 PRC Phase I investigation. Anomalies found.

1988 HLA site reconnaissance survey. Survey points within background ranges.

Contamination Potential: Known-Restricted Access.

Contaminated Media:

Surface Soil: High Subsurface Soil: High Sediment: None Surface Water: None Groundwater: Low

Air: None

Structures: None

Drainage Systems: None

Potential Migration Pathways:

Surface Soil: Moderate Subsurface Soil: Moderate

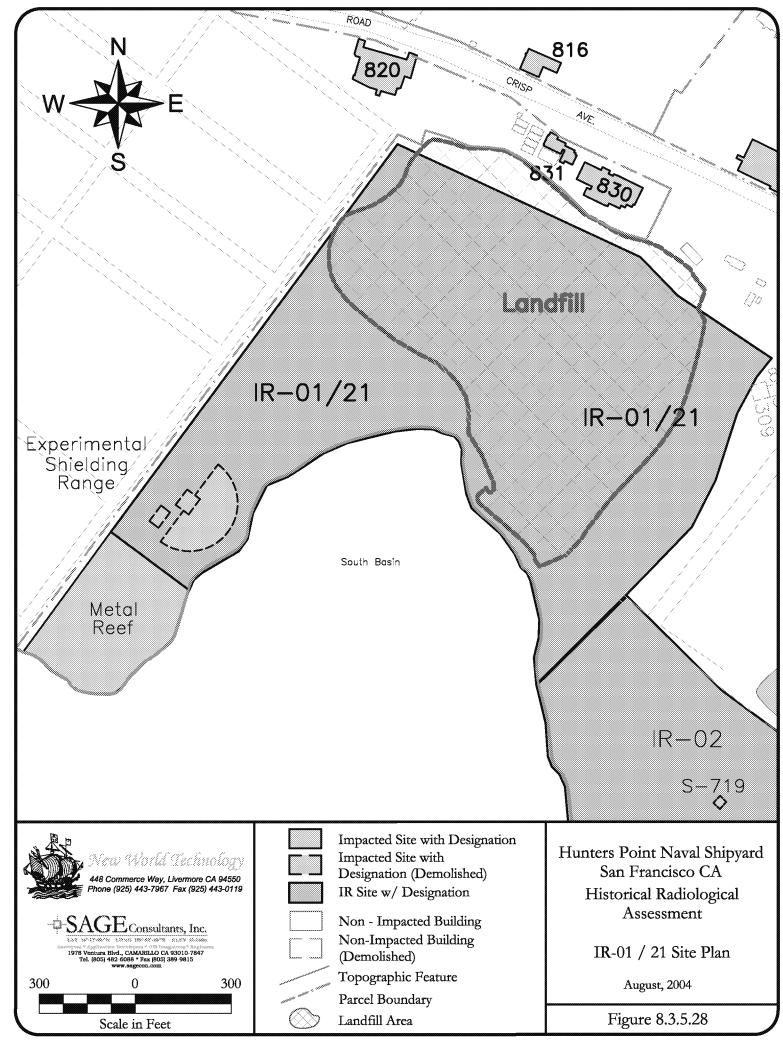
Sediment: None Surface Water: None Groundwater: Low

Air: None

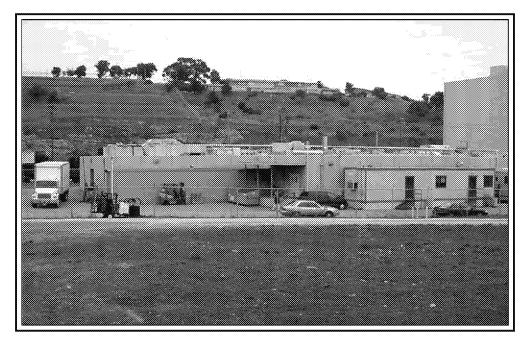
Structures: None

Drainage Systems: None

Recommended Actions: Review Phase V Characterization Survey results. Remediate known areas of elevated readings. Perform Final Status Survey.



8.3.9.3 Building 830



Site Description: A pre-engineered, large, irregular-shaped metal shed, measuring approximately 16,500 square feet at its foundation. No longer Navy property. A building site plan is provided in Figure 8.3.9.1 above. A floor plan is in Reference HRA-4733.

Former Uses: NRDL research animal breeding facilities and kennels (HRA-557, p 10 and 2 following pages).

Current Uses: Sold to the University of California at San Francisco.

Radionuclides of Concern: Cs-137 and Ra-226.

Previous Radiological Investigations: None.

Contamination Potential: Unlikely.

Contaminated Media:

Surface Soil: None Subsurface Soil: None Sediment: None Surface Water: None Groundwater: None

Air: None Structures: Low

Drainage Systems: None

Potential Migration Pathways:

Surface Soil: None Subsurface Soil: None Sediment: None

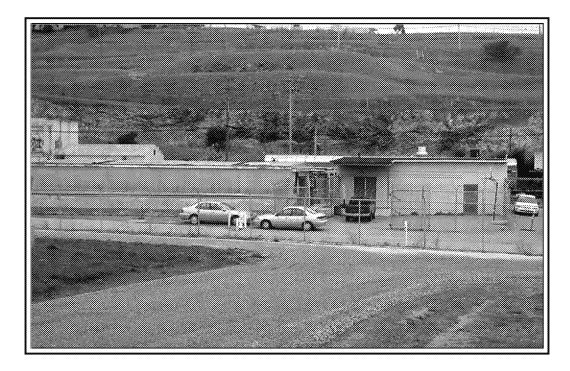
Surface Water: None Groundwater: None

Air: None Structures: Low

Drainage Systems: None

Recommended Actions: Scoping Survey.

8.3.9.4 Building 831



Site Description: The building is irregular in construction and measures 4,400 square feet at its foundation. No longer considered Navy property. A building site plan is provided in Figure 8.3.9.1 above.

Former Uses: Research Animal Facility (HRA-333, p 31; HRA-2927, p 16).

Current Uses: Sold to University of California at San Francisco.

Radionuclides of Concern: Cs-137 and Ra-226.

Previous Radiological Investigations: None.

Contamination Potential: Unlikely.

Contaminated Media:

Surface Soil: None Subsurface Soil: None

Sediment: None Surface Water: None Groundwater: None

Air: None Structures: Low

Drainage Systems: None

Potential Migration Pathways:

Surface Soil: None Subsurface Soil: None Sediment: None

Surface Water: None Groundwater: None

Air: None Structures: Low

Drainage Systems: None

Recommended Actions: Scoping Survey.

Response:

NRDL was an organization with access to all types of radioactive materials and machines that produce radiation. While it is true that the Cyclotron was never fully operational, it was constructed and tested within Building 820. The types of targets used in the testing are unknown.

The Draft HRA had many inaccuracies and inconsistencies and therefore the Navy issued the significantly revised Draft Final HRA.

The Navy takes a very conservative approach to radiological surveys, particularly when they involve the transfer of Navy property for unrestricted use. This approach allows the Navy to eliminate any future liability after the property is transferred. This is particularly true at HPS, where many of NRDL's records were destroyed and specific practices cannot be determined. Therefore, the recommendation for a Scoping Survey remains as the recommended action in the Final HRA.

5. Comment:

Specific Review: Kennels (Bldg 830): This facility was used for breeding of test animals by NRDL. No evidence has been presented in either the draft HRA or the draft final HRA that suggests the facility was even used for storage, use or analysis of radioactive material or animal carcasses. Further, in the draft version of the HRA it was concluded that no further action be taken with this site. In the draft final version of the HRA the conclusion is that a scoping survey is required. No new evidence was presented in the draft final version of the HRA to support the change in conclusions. There is no expectation that this facility would be radioactively contaminated through its use and no evidence exists that radioactive materials would have been stored or used in this facility. The only consideration in the conclusion is the facility was managed by NRDL and thus potentially radioactively contaminated by association. In addition, the draft final HRA recommendation to perform a scoping survey is not consistent with Navy practices of not performing surveys on facilities that were never used for a radiological purpose or exposed to radioactive contamination or activation. Based on the information reviewed to date, the fact that the facility was not licensed and the Navy's initial recommendation, it is recommended that no further action in the form of radiological surveys be performed on this facility.

Response:

NRDL was an organization with access to all types of radioactive materials and machines that produce radiation. NRDL used these materials and machines for experimentation with all types of animals. While it is recognized that Building 830 was not occupied until 1967, the possibility exists that NRDL used the building to house animals dosed with radioactive materials. This is evident by the fact that there was a "dirty" entrance to the building as well as a "clean to dirty" traffic flow.

FINAL E-23

Additionally, there were animal quarantine and holding rooms as well as a microbiology and multi-purpose laboratory for check of animals.

The Draft HRA had many inaccuracies and inconsistencies and therefore the Navy issued a significantly revised Draft Final HRA.

The Navy takes a very conservative approach to radiological surveys, particularly when they involve the transfer of Navy property for unrestricted use. This approach allows the Navy to eliminate any future liability after the property is transferred. This is particularly true at HPS, where extensive experimentation using radioactive materials and animals occurred, many of NRDL's records were destroyed, and specific practices cannot be determined. Therefore, the recommendation for a Scoping Survey remains as the recommended action in the Final HRA.

6. Comment:

Specific Review: Animal Research Facility (Bldg 831): This facility was used for breeding of test animals by NRDL. No evidence has been presented in either the draft HRA or the draft final HRA that suggests the facility was ever used for storage, use or analysis of radioactive material or animal carcasses. Further, in the draft version of the HRA it was concluded that no further action be taken with this site. In the draft final version of the HRA the conclusion is that a scoping survey is required. No new evidence was presented in the draft final version of the HRA to support the change in There is no expectation that this facility would be conclusions. radioactively contaminated through its use and no evidence exists that radioactive materials would have been stored or used in this facility. The only consideration in the conclusion is the facility was managed by NRDL and thus potentially radioactively contaminated by association. In addition, the draft final HRA recommendation to perform a scoping survey is not consistent with the Navy practices of not performing surveys on facilities that were never used for a radiological purpose or exposed to radioactive contamination or activation. Based on the information reviewed to date, the fact that the facility was not licensed, and the Navy's initial recommendation, it is recommended that no further action in the form of radiological surveys be performed on this facility.

Response:

NRDL was an organization with access to all types of radioactive materials and machines that produce radiation. Building 831 is listed as the NRDL Animal Research Facility; however, very little information is available about the specific types of research that were conducted in the building. With its close proximity to Building 815 and the many animal experiments that were conducted using radioactive materials, it is reasonable to assume that there is a possibility of contamination remaining in the building.

FINAL E-24

The Draft HRA had many inaccuracies and inconsistencies and therefore the Navy issued the significantly revised Draft Final HRA.

The Navy takes a very conservative approach to radiological surveys, particularly when they involve the transfer of Navy property for unrestricted use. This approach allows the Navy to eliminate any future liability after the property is transferred. This is particularly true at HPS, where extensive experimentation using radioactive materials and animals occurred, many of NRDL's records were destroyed, and specific practices cannot be determined. Therefore, the recommendation for a Scoping Survey remains the recommended action in the Final HRA.

FINAL E-25